

UNITED STATES DEPARTMENT OF AGRICULTURE,

FEDERAL HORTICULTURAL BOARD,

WASHINGTON, D. C.

MARCH 1, 1915.

NEWS LETTER NO. 17.

DEAR SIR: The most important interception reported to this office since the issuance of News Letter No. 15, on December 28, 1914, is the finding of egg masses of the gipsy moth (*Porthetria dispar*) on cedars from Japan by Messrs. B. B. Whitney and D. P. T. Macdonald, of California. Cocoons of the dagger moth (*Apatela auricoma*), family Noctuidæ, have been detected on numerous occasions on miscellaneous nursery stock by inspectors of Ohio, North Carolina, and Nebraska. This insect, the larvæ of which appear to be general feeders, is reported to have a very wide distribution in Europe. Some 1,466 pear seedlings from France were found to be infested with the European pear scale (*Epidiaspis piricola*) by Mr. S. C. Clapp, of North Carolina.

Gracilaria azaleæ, referred to in previous letters, has been reduced to a synonym of *Gracilaria zachrysa*, which was described by Meyrick from specimens received from Ceylon. This insect is also injurious to rhododendrons, and appears to have been introduced into Holland from Japan in 1912 or 1913.

Dr. G. R. Lyman, formerly professor of botany at Dartmouth College, Hanover, N. H., was recently appointed pathologist of the Federal Horticultural Board, and will assist Mr. Beattie, the pathological inspector of the board.

Yours, very truly,

C. L. MARLATT,
Chairman of Board.

LIST BY COUNTRIES OF PESTS COLLECTED.

(The number in parentheses following name of host indicates the number of times reported. Absence of number indicates one report.)

Country of origin and name of pest.	Host.
ALGERIA.	
Disease: Smut.....	Barley.
ANGOLA (Africa).	
<i>Plodia interpunctella</i> (Indian meal moth).....	Andropogon sorghum.
Disease: Smut.....	Sorghum.
AUSTRALIA.	
<i>Aspidiotus camelliae</i> (greedy scale).....	Arduena.
<i>Aspidiotus lataniæ</i> (scale insect).....	Palms.
<i>Aspidiotus</i> sp. (scale insect).....	Dracaena.
<i>Ceroplastes</i> sp. (scale insect).....	Gardenia.
<i>Chrysomphalus ficus</i> (Florida red scale).....	Eugenia.
Do.....	Ficus sp.
Do.....	Ficus australis.

List by countries of pests collected—Continued.

Country of origin and name of pest.	Host.
AUSTRALIA—continued.	
Coccus hesperidum (soft brown scale).....	Gardenia.
Euthrips sp.....	Arduena.
Pseudococcus sp. (mealy bug).....	Do.
Do.....	Castanospermum.
Do.....	Dracaena.
Do.....	Gardenia.
BELGIUM.	
Aleyrodes sp. (white fly).....	Azaleas (2).
Aspidiotus hederæ (?) (ivy scale?).....	Palms.
Chrysomphalus dictyospermi (scale insect).....	Aspidistra.
Do.....	Palms.
Coccus hesperidum (soft brown scale).....	Bays.
Dasychira pudibunda (moth).....	(?)
Gracilaria zachrysa (?) (leaf miner).....	Azaleas (2).
Larvæ.....	Azaleas.
Leaf folder, Lepidopterous.....	Do.
Leaf rollers.....	Do.
Leaf tyer.....	Do.
Red spiders.....	Do.
Thrips.....	Azaleas (6).
Do.....	Rhododendrons.
Diseases:	
Botrytis sp.....	Hydrangeas.
Exobasidium sp.....	Azaleas (6).
Leaf fungus.....	Rhododendrons.
Leaf spot.....	Azaleas.
Pestalozzia sp.....	Rhododendrons.
CHINA.	
Calandra oryza (rice weevil).....	Andropogon sorghum (Kaoliang) (2).
Diseases:	
Puccinia graminis.....	Barley.
Ustilago hordei? (smut).....	Hordeum sp.
COSTA RICA.	
Lonchophorus nitidus.....	Bunchosia macrophylla.
DENMARK.	
Notolophus antiqua (European tussock moth) (eggs).....	Roses.
Pupa.....	Do.
EGYPT.	
Cathartus advena (foreign grain beetle).....	Apricot seed.
Ephestia cautella (fig moth).....	Do.
Silvanus surinamensis (corn Silvanus).....	Do.
ENGLAND.	
Aspidiotus hederæ (ivy scale).....	Lapergerias.
Ceuthophilus sp.; family Locustidæ.....	In packing.
Lepidosaphes ulmi (oyster-shell scale).....	Apple.
Notolophus antiqua (European tussock moth) (eggs).....	Manetti stocks.
Diseases:	
Bacterium tumefaciens (crown gall).....	Rose stocks (3).
Gall, root.....	Do.
FRANCE.	
Apatela auricoma (dagger moth) (pupa).....	Elm.
Apatela auricoma (dagger moth) (empty cocoon).....	Fruit stocks.
Apatela auricoma (dagger moth) (pupa).....	Manetti rose stocks (4).

List by countries of pests collected—Continued.

Country of origin and name of pest.	Host.
FRANCE—continued.	
<i>Apatela auricoma</i> (dagger moth) (cocoon).....	Mazzard cherry.
<i>Apatela auricoma</i> (dagger moth) (cocoons)	Pear.
Do.....	(?).
<i>Aulacaspis rosæ</i> (rose scale).....	Manetti stocks.
<i>Epidiaspis piricola</i> (European pear scale)	Pear seedlings.
Do.....	Seedlings.
Grubs, white, Coleopterous.....	Fruit stocks.
Do.....	(?).
<i>Lachnosterna</i> sp. (beetle).....	In packing around apple stock seedlings.
Lepidopterous pupæ.....	Spirea.
Lepidopterous pupa.....	Cornus.
Lepidopterous pupæ, dead.....	Spirea.
<i>Lepidosaphes beckii</i> (purple scale).....	Apple.
Do.....	Pear.
<i>Lepidosaphes ulmi</i> (oyster-shell scale).....	Fruit stocks.
Loopers, egg mass.....	(?).
<i>Notolophus antiqua</i> (European tussock moth) (eggs).....	Manetti rose stocks (2).
Do.....	Mahaleb stocks.
Do.....	Ornamental stocks.
Do.....	Birch.
Pupa.....	Mahaleb (cherry).
Diseases:	
<i>Bacterium tumefaciens</i> (crown gall).....	Apple (2).
Do.....	Fruit stocks (2).
Do.....	Pear.
Do.....	Pear seedlings.
Do.....	Philadelphus.
Do.....	Quince.
Do.....	Seedlings.
Do.....	(?).
Blight.....	Pear stocks.
Canker fungus.....	Ailanthus.
Do.....	Paper birch.
Canker (fungus), probably <i>Cytospora</i>	Norway maple.
<i>Fusarium</i> sp. (spores).....	<i>Wistaria sinensis</i> .
Gall (root).....	Pear stocks.
Do.....	Apple stocks.
Hairy root.....	Do.
Do.....	Fruit stocks.
Do.....	(?).
<i>Nectria cinnabarina</i> (coral-spot fungus).....	<i>Wistaria sinensis</i> .
<i>Pestalozzia</i> sp.....	Salix.
<i>Phragmidium subcorticium</i> (?) (rose rust) (?).....	<i>Rosa rubiginosa</i> .
<i>Phyllosticta lemitata</i> (?) (leaf spot).....	Apple stock seedlings.
GERMAN EAST AFRICA.	
<i>Coccotrypes</i> n. sp.....	<i>Annona senegalensis</i> (seed).
GERMANY.	
<i>Aleyrodes</i> sp. (white fly).....	Azaleas.
<i>Aspidiotus hederæ</i> (ivy scale).....	Camellias (2).
<i>Coccus hesperidum</i> (soft brown scale).....	Camellias.
HOLLAND.	
<i>Aleyrodes</i> sp. (white fly).....	Azaleas.
<i>Aphis</i> sp. (plant louse).....	Boxwood.
<i>Coccus hesperidum</i> (soft brown scale).....	Laurel.
Cocoon, empty.....	Roses.
Flea beetle.....	Hydrangea.
Galls, leaf.....	Boxwood.
<i>Gracilaria zachrysa</i> (?) (leaf miner).....	Azaleas.
Larva.....	Wistarias.
Leaf miner.....	Holly plants.
Do.....	Rhododendrons.

List by countries of pests collected—Continued.

Country of origin and name of pest.	Host.
HOLLAND—continued.	
Leaf tyer pupæ.....	Azaleas.
Lecanium corni (?) (European fruit Lecanium) (?).....	Crataegus.
Lecanium nigrofasciatum (terrapin scale).....	Do.
Lepidopterous cocoon, empty.....	(?).
Lepidopterous (?) larva.....	Rhododendron.
Lepidosaphes ulmi (oyster-shell scale).....	(?).
Do.....	Apple.
Do.....	Boxwood (27).
Do.....	Crataegus.
Do.....	Evergreen shrubs.
Do.....	Hawthorn.
Do.....	Lilacs.
Do.....	Pear.
Leptobyrsa explanata (Tingitid).....	Rhododendrons.
Myzus persicæ (?) (aphid).....	Hertensias.
Notolophus antiqua (European tussock moth) (eggs).....	(?).
Do.....	Cerasus.
Do.....	Deutzia.
Do.....	Roses (4).
Phytomyza aquifolii (dipterous leaf miner).....	Hollies (3).
Do.....	Boxwood.
Pseudaonidia paeoniæ (scale insect).....	Azalea.
Pseudococcus sp. (mealy bug).....	Do.
Do.....	Delphinium.
Psylla buxi eggs?.....	Boxwood.
Psylla buxi injury.....	Do.
Pupa.....	Roses.
Do.....	Spirea.
Red spider.....	Choysia ternata.
Staphylinid beetles.....	Roses.
Thrips.....	Choysia ternata.
Do.....	Azaleas (2).
Do.....	Rhododendrons.
Tingitid eggs (lacewing).....	Rhododendrons (3).
Tortrix (pupa).....	Rhododendron.
Wireworm (in soil).....	Magnolia.
Diseases:	
Bacterium tumefaciens (crown gall).....	Rose (2).
Botrytis sp.....	Hydrangeas (2).
Do.....	Rose.
Botrytis vulgaris (gray mold).....	Dead lilac leaves.
Canker.....	Rose (2).
Fungus spots.....	Rhododendrons (2).
Knot (root knot).....	Roses.
Leaf curl.....	Rhododendrons.
Leaf fungus.....	Boxwood.
Do.....	Hydrangea.
Do.....	Rhododendrons (11).
Leaf spot.....	Hydrangeas.
Do.....	Kalmia leaves.
Do.....	Rhododendrons (13).
Mildew (?).....	Roses.
Pencilium.....	Do.
Pestalozzia guepini.....	Rhododendrons (7).
Pestalozzia guepini Desm. var. vaccinii ?.....	Rhododendrons.
Pestalozzia sp.....	Kalmia leaves.
Do.....	Rhododendrons (17).
Phyllosticta sp.....	Euonymus.
Sphaerotheca pannosa (powdery mildew).....	Roses (6).
Volutella buxi.....	Boxwood (2).
IRELAND.	
Disease: Canker.....	Rose plants.

List by countries of pests collected—Continued.

Country of origin and name of pest.	Host.
ITALY.	
<i>Lepidosaphes beckii</i> (purple scale).....	Oranges.
JAPAN.	
<i>Agromyza</i> sp.....	Wistaria.
<i>Anomala orientalis</i> (grubs).....	In soil around ornamental trees.
<i>Aspidiotus perniciosus</i> (San Jose scale).....	Flowering cherry.
Borer.....	Maple.
Borer larvæ.....	Wistaria.
<i>Ceroplastes ceriferus</i> (wax scale).....	Persimmons.
<i>Chrysomphalus ficus</i> (Florida red scale).....	Aspidistra.
<i>Diaspis pentagona</i> (West Indian peach scale).....	Peach.
Do.....	Flowering cherry.
<i>Diaspis pentagona</i> var. <i>auranticolor</i>	Persimmons.
<i>Hemichionaspis aspidistræ</i> (<i>Aspidistra</i> scale).....	Aspidistra.
<i>Leucaspis bambusæ</i> (scale insect).....	Bamboo.
Noctuid larvæ.....	(?)
<i>Porthetria dispar</i> (gipsy moth) (egg clusters).....	Cedar trees.
<i>Pseudaonidia pæoniæ</i> (scale insect).....	Azaleas (2).
<i>Pseudococcus adonidum</i> (long-tailed mealy bug).....	Dwarf <i>Prunus</i> .
<i>Pseudococcus azaleæ</i> (mealy bug).....	Azaleas (2).
<i>Pseudococcus</i> sp. (mealy bug).....	Raphiolepis.
Do.....	Persimmons.
<i>Sericea japonica</i> (grub).....	In soil around ornamental trees.
Tipulidæ.....	(?)
Weevil, grubs and pupæ.....	In soil around ornamental trees.
Diseases:	
Fungus.....	Kumquat trees.
Do.....	<i>Pueraria thunbergiana</i> .
<i>Graphis</i> sp. (lichen).....	Pyrus.
<i>Lastodiplodia</i> sp.....	Chestnut.
MEXICO.	
<i>Spermophagus</i> sp. (weevil).....	Cowpea (2).
Disease: <i>Pestalozzia</i> sp.....	<i>Quercus xalapensis</i> Humb.
NEW ZEALAND.	
<i>Pseudococcus</i> sp. (mealy bug).....	Flax plant.
<i>Saissetia oleæ</i> (black scale).....	(?)
PERSIA.	
Disease: <i>Ustilago hordei</i> ? (smut).....	Barley No. 2.
PHILIPPINE ISLANDS.	
Ants.....	Orchids.
<i>Parlatoria</i> sp. (scale insect).....	Do.
<i>Saissetia oleæ</i> (black scale).....	Do.
Weevils.....	Do.
PORTUGAL.	
<i>Bruchus pisorum</i> (bean weevil).....	Horse beans.
SCOTLAND.	
Pupa.....	Manetti stock.
SIAM.	
<i>Calandra oryza</i> (rice weevil).....	Rice.
<i>Lophocateres pusillus</i> (Siamese grain beetle).....	Do.
<i>Rhizopertha dominica</i> (lesser grain borer).....	Do.
<i>Sitotroga cerealella</i> (Angoumois grain moth).....	Do.
TRANSVAAL (SOUTH AFRICA).	
<i>Bruchus</i> sp. (weevil).....	<i>Acacia horrida</i> .

LIST BY STATES OF PESTS COLLECTED.

[The number in parentheses following name of country indicates the number of times reported. Absence of number indicates one report.]

State in which collected and name of pest.	Host.	Country of origin.
ALABAMA.		
Disease: <i>Phyllosticta</i> sp.	<i>Euonymus</i>	Holland.
ARKANSAS.		
<i>Lachnosterna</i> sp. (beetle)	In packing around apple stock seedlings.	France.
Disease: <i>Phyllosticta lemitata</i> (?) (leaf spot)	Apple stock seedlings	Do.
CALIFORNIA.		
<i>Agromyza</i> sp.	<i>Wistaria</i>	Japan.
Ants	Orchids	Philippine Islands.
<i>Aspidiotus camelliæ</i> (greedy scale)	<i>Arduena</i>	Australia.
<i>Aspidiotus lataniæ</i> (scale insect)	Palms	Do.
<i>Aspidiotus</i> sp. (scale insect)	<i>Dracaena</i>	Do.
Borer larvæ	<i>Wistaria</i>	Japan.
<i>Ceroplastes ceriferus</i> (wax scale)	Persimmons	Do.
<i>Ceroplastes</i> sp. (scale insect)	<i>Gardenia</i>	Australia.
<i>Chrysomphalus ficus</i> (Florida red scale)	<i>Ficus australis</i>	Do.
Do	<i>Aspidistra</i>	Japan.
Do	<i>Eugenia</i>	Australia.
Do	<i>Ficus</i> sp.	Do.
<i>Coccus hesperidum</i> (soft brown scale)	Laurel	Holland.
Do	<i>Gardenia</i>	Australia.
<i>Diaspis pentagona</i> (West Indian peach scale)	Peach	Japan.
<i>Diaspis pentagona</i> var. <i>auranticolor</i>	Persimmons	Do.
<i>Euthrips</i> sp.	<i>Arduena</i>	Australia.
<i>Hemichionaspis aspidistræ</i> (<i>Aspidistra</i> scale)	<i>Aspidistra</i>	Japan.
Leaf miner	Holly plants	Holland.
<i>Lepidosaphes ulmi</i> (oyster-shell scale)	Evergreen shrubs	Do.
Do	Pear	Do.
Do	Hawthorn	Do.
Do	Boxwood	Holland (13).
<i>Leucaspis bambusæ</i> (scale insect)	Bamboo	Japan.
Loopers (egg mass)	(?)	France.
Noctuid larvæ	(?)	Japan.
<i>Parlatoria</i> sp. (scale insect)	Orchids	Philippine Islands.
<i>Phytomyza aquifolii</i> (dipterous leaf miner)	Hollies	Holland (3).
Do	Boxwood	Holland.
<i>Porthetria dispar</i> (gipsy moth) (eggs)	Cedar trees	Japan.
<i>Pseudonidia paeoniæ</i> (scale insect)	Azaleas	Japan (2).
<i>Pseudococcus azaleæ</i> (mealy bug)	do	Do.
<i>Pseudococcus</i> sp. (mealy bug)	<i>Arduena</i>	Australia.
Do	<i>Castanospermum</i>	Do.
Do	<i>Dracaena</i>	Do.
Do	Flax plant	New Zealand.
Do	<i>Gardenia</i>	Australia.
Do	Persimmons	Japan.
Do	<i>Raphiolepis</i>	Do.
<i>Saissetia oleæ</i> (black scale)	Orchids	Philippine Islands.
Do	(?)	New Zealand.
Spider, red	<i>Choysia ternata</i>	Holland.
Thrips	do	Do.
Do	Azaleas	Belgium.
Tipulidæ	(?)	Japan.
Weevils	Orchids	Philippine Islands.
Diseases:		
Fungus	Kumquat trees	Japan.
Do	<i>Pueraria thunbergiana</i>	Do.
CONNECTICUT.		
Cocoon (empty)	Roses	Holland.
<i>Notolophus antiqua</i> (European tussock moth) (eggs)	do	Do.

List by States of pests collected—Continued.

State in which collected and name of pest.	Host.	Country of origin.
CONNECTICUT—continued.		
Diseases:		
Bacterium tumefaciens (crown gall).....	Philadelphus.....	France.
Do.....	Rose stocks.....	England (2).
Phragmidium subcorticium (?) (rose rust)(?).....	Rosa rubiginosa.....	France.
DISTRICT OF COLUMBIA.		
Aspidiotus perniciosus (San Jose scale).....	Flowering cherry.....	Japan.
Bruchus sp. (weevil).....	Acacia horrida.....	Transvaal.
Calandra oryza (rice weevil).....	Andropogon sorghum (Kao-liang).....	China (2).
Do.....	Rice.....	Siam.
Cathartus advena (foreign grain beetle).....	Apricot seed.....	Egypt.
Coccotrypes n. sp.....	Annona senegalensis (seed).....	German East Africa.
Diaspis pentagona (West Indian peach scale).....	Flowering cherry.....	Japan.
Ephestia cautella (fig moth).....	Apricot seed.....	Egypt.
Lepidosaphes beckii (purple scale).....	Oranges.....	Italy.
Lonchophorus nitidus.....	Bunchosia macrophylla.....	Costa Rica.
Lophocateres pusillus (Siamese grain beetle).....	Rice.....	Siam.
Plodia interpunctella (Indian meal moth).....	Andropogon sorghum.....	Angola.
Rhizopertha dominica (lesser grain borer).....	Rice.....	Siam.
Silvanus surinamensis (corn Silvanus).....	Apricot seed.....	Egypt.
Sitotroga cerealella (Angoumois grain moth).....	Rice.....	Siam.
Spermophagus sp. (weevil).....	Cowpea.....	Mexico (2).
Diseases:		
Botrytis sp.....	Rose.....	Holland.
Do.....	Hydrangeas.....	Holland (2).
Botrytis vulgaris (gray mold).....	Dead lilac leaves.....	Holland.
Exobasidium.....	Azaleas.....	Belgium.
Lasiodiplodia sp.....	Chestnut.....	Japan.
Pestalozzia guepini.....	Rhododendrons.....	Holland (3).
Pestalozzia sp.....	Quercus xalapensis Humb.....	Mexico.
Puccinia graminis.....	Barley.....	China.
Smut.....	Sorghum.....	Angola.
Do.....	Barley.....	Algeria.
Ustilago hordei? (Smut).....	Barley No. 2.....	Persia.
Do.....	Hordeum sp.....	China.
Volutella buxi.....	Boxwood.....	Holland (2).
GEORGIA.		
Lepidosaphes ulmi (oyster-shell scale).....	Fruit stocks.....	France.
Thrips.....	Azaleas.....	Holland.
HAWAII.		
Anomala orientalis, grubs.....	In soil around ornamental trees.....	Japan.
Sericea japonica, grub.....	do.....	Do.
Weevil (grubs and pupæ).....	do.....	Do.
ILLINOIS.		
Dasychira pudibunda (moth).....	(?).....	Belgium.
Leaf folder, lepidopterous.....	Azaleas.....	Do.
Thrips.....	do.....	Do.
Disease: Graphis sp. (lichen).....	Pyrus.....	Japan.
INDIANA.		
Gracilaria zachrysa (?) (leaf miner).....	Azaleas.....	Holland.
Do.....	do.....	Belgium.
Larva.....	Wistarias.....	Holland.
Lecanium nigrofasciatum (terrapiu scale).....	Crataegus.....	Do.
Lepidosaphes ulmi (oyster-shell scale).....	do.....	Do.

List by States of pests collected—Continued.

State in which collected and name of pest.	Host.	Country of origin.
INDIANA—continued.		
Myzus persicae (?) (aphid)	Hortensias	Holland.
Notolophus antiqua (European tussock moth) (eggs)	Manetti stocks	England.
Do	Cerasus	Holland.
Diseases:		
Bacterium tumefaciens (crown gall)	Fruit stocks	France.
Do	Manetti stocks	England.
Exobasidium (?)	Azaleas	Belgium.
Fungus	Hydrangea leaves	Holland.
Mildew (?)	Roses	Do.
Pencilium	do	Do.
Pestalozzia guelpini	Rhododendrons	Do.
IOWA.		
Pupa	Mahaleb (cherry)	France.
KANSAS.		
Pseudococcus sp. (mealy bug)	Delphinium	Holland.
Disease: Knot (root knot)	Roses	Do.
KENTUCKY.		
Leaf miner	Rhododendrons	Holland.
Lepidosaphes ulmi (oyster-shell scale)	Boxwood	Holland (2).
Disease: Leaf fungus	do	Holland.
MARYLAND.		
Aphis sp. (plant louse)	Boxwood	Holland.
Lepidosaphes ulmi (oyster-shell scale)	do	Holland (6).
Thrips	Rhododendrons	Holland.
Do	do	Belgium.
Do	Azaleas	Belgium (2).
Diseases:		
Exobasidium sp	do	Belgium (4).
Leaf curl	Rhododendrons	Holland.
Leaf spot	Hydrangeas	Do.
Sphaerotheca pannosa (powdery mildew)	Roses	Holland (6).
MASSACHUSETTS.		
Chrysomphalus dictyospermi (scale insect)	Aspidistra	Belgium.
Lepidosaphes ulmi (oyster-shell scale)	Lilacs	Holland.
Notolophus antiqua (European tussock moth) (eggs)	Roses	Holland (2).
Do	do	Denmark.
Do	Deutzia	Holland.
Do	Manetti stock	France.
Pupa	Roses	Holland.
Do	do	Denmark.
Do	Spirea	Holland.
Do	Manetti rose stock	Scotland.
Wireworm (in soil)	Magnolia	Holland.
MISSOURI.		
Aleyrodes sp. (white fly)	Azaleas	Belgium.
Gracilaria zachrysa (?) (leaf miner)	do	Do.
Grubs, white, coleopterous	(?)	France.
Do	Fruit stocks	Do.
Larvæ	Azaleas	Belgium.
Leaf rollers	Azaleas	Belgium.
Leaf tyer	do	Do.
Do	do	Holland.
Pseudococcus sp. (mealy bug)	do	Do.
Spiders, red	do	Belgium.
Thrips	do	Belgium (2).
Do	do	Holland.

List by States of pests collected—Continued.

State in which collected and name of pest.	Host.	Country of origin.
MISSOURI—continued.		
Diseases:		
Bacterium tumefaciens (crown gall).....	Fruit stocks.....	France.
Do.....	?.....	Do.
Hairy root.....	Fruit stocks.....	Do.
Do.....	?.....	Do.
Leaf spot.....	Azaleas.....	Belgium.
Do.....	Rhododendrons.....	Holland. (6).
NEBRASKA.		
Apatela auricoma (dagger moth) (empty cocoon)....	Fruit stocks.....	France.
Flea beetle.....	Hydrangea.....	Holland.
Lepidopterous cocoon (empty).....	?.....	Do.
Staphylinid beetles.....	Roses.....	Do.
Disease: Bacterium tumefaciens (crown gall).....	do.....	Do.
NEW JERSEY.		
Aleyrodes sp. (white fly).....	Azaleas.....	Belgium.
Do.....	do.....	Holland.
Do.....	do.....	Germany.
Aspidiotus hederæ (ivy scale).....	Camellias.....	Germany (2).
Do.....	Lapergerias.....	England.
Ceuthophilus sp. (family Locustidæ).....	In packing.....	Do.
Chrysomphalus dictyospermi (scale insect).....	Palms.....	Belgium.
Coccus hesperidum (soft brown scale).....	Bays.....	Do.
Do.....	Camellias.....	Germany.
Lepidosaphes ulmi (oyster-shell scale).....	Apple.....	Holland.
Do.....	do.....	England.
Notolophus antiqua (European tussock moth) (eggs)...	Rose.....	Holland.
Tingitid eggs (lacewing).....	Rhododendrons.....	Holland (3).
NEW YORK.		
Disease: Gall (root).....	Manetti rose stocks.....	England.
NORTH CAROLINA.		
Apatela auricoma (dagger moth) (cocoon).....	Mazzard cherry.....	France.
Do.....	?.....	Do.
Do.....	Pear.....	Do.
Borer.....	Maple.....	Japan.
Epidiaspis piricola (European pear scale).....	Pear seedlings.....	France.
Do.....	Seedlings.....	Do.
Lepidosaphes beckii (purple scale).....	Apple.....	Do.
Do.....	Pear.....	Do.
Diseases:		
Bacterium tumefaciens (crown gall).....	Pear.....	Do.
Do.....	Seedlings.....	Do.
Do.....	Apple.....	France (2).
Do.....	Pear seedlings.....	France.
OHIO.		
Apatela auricoma (dagger moth) (pupa).....	Elm.....	France.
Do.....	Manetti rose stocks.....	France (4).
Aulacaspis rosæ (rose scale).....	do.....	France.
Lecanium corni (?) (European fruit lecanium) (?)....	Cratægus.....	Holland.
Lepidosaphes ulmi (oyster-shell scale).....	?.....	Do.
Do.....	Boxwood.....	Do.
Notolophus antiqua (European tussock moth) (eggs)...	?.....	Do.
Do.....	Ornamental stocks.....	France.
Do.....	Birch.....	Do.
Do.....	Rose stocks.....	Do.
Tortrix (pupa).....	Rhododendrons.....	Holland.

Lists by States of pests collected—Continued.

State in which collected and name of pest.	Host.	Country of origin.
OHIO—continued.		
Diseases:		
Gall (root).....	Manetti rose stocks.....	England.
Do.....	Rose stocks.....	Do.
OREGON.		
Disease: Bacterium tumefaciens (crown gall).....	Rose bushes.....	Holland.
PENNSYLVANIA.		
Aspidiotus hederæ (?) (ivy scale?).....	Palms.....	Belgium.
Lepidopterous (?) larva.....	Rhododendrons.....	Holland.
Lepidopterous pupæ.....	Spirea.....	France (2).
Lepidopterous pupa.....	Cornus.....	France.
Lepidosaphes ulmi (oyster-shell scale).....	Boxwood.....	Holland (3).
Leptobyrza explanata (Tingitid).....	Rhododendrons.....	Holland.
Notolophus antiqua (European tussock moth) (eggs).....	Mahaleb stocks.....	France.
Pseudonidia pæoniæ (scale insect).....	Azaleas.....	Holland.
Psylla buxi eggs?.....	Boxwood.....	Do.
Psylla buxi injury.....	do.....	Do.
Diseases:		
Bacterium tumefaciens (crown gall).....	Quince.....	France.
Blight.....	Pear stocks.....	Do.
Canker.....	Rose stems.....	Holland.
Do.....	Rose plants.....	Ireland.
Do.....	Roses.....	Holland.
Canker fungus.....	Ailanthus.....	France.
Do.....	Paper birch.....	Do.
Canker (fungus) probably Cytospora.....	Norway maple.....	Do.
Fusarium sp. (spores).....	Wistaria sinensis.....	Do.
Fungus.....	Rhododendron leaves.....	Holland.
Fungus spots.....	do.....	Do.
Do.....	Rhododendrons.....	Do.
Gall (root).....	Pear stocks.....	France.
Do.....	Apple stocks.....	Do.
Hairy root.....	do.....	Do.
Leaf fungus.....	Rhododendrons.....	Holland (10).
Do.....	do.....	Belgium.
Leaf spot.....	do.....	Holland (7).
Do.....	Kalmia leaves.....	Holland.
Nectria cinnabarina (coral-spot fungus).....	Wistaria sinensis.....	France.
Pestalozzia guepini.....	Rhododendrons.....	Holland (3).
Pestalozzia guepini Desm. var. vaccinii?.....	do.....	Holland.
Pestalozzia sp.....	Salix.....	France.
Do.....	Rhododendrons.....	Holland (17).
Do.....	do.....	Belgium.
Do.....	Kalmia leaves.....	Holland.
TENNESSEE.		
Disease: Botrytis sp.....	Hydrangeas.....	Belgium.
WASHINGTON.		
Galls (leaf).....	Boxwood.....	Holland.
Lepidosaphes ulmi (oyster-shell scale).....	do.....	Holland (2).
Pseudococcus adonidum (long-tailed mealy bug).....	Dwarf Prunus.....	Japan.